PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

Claims 1-8 (Cancelled)

9. (Original) An apparatus for transmitting channel quality values over a feedback channel to a base station, comprising:

a re-synch subchannel generation system for generating full channel quality values; and

a differential feedback subchannel generation system for generating a plurality of incremental values, wherein the plurality of incremental values are multiplexed with the full channel quality values.

10. (Original) The apparatus of Claim 9, wherein the plurality of incremental values are code-multiplexed with the full channel quality values.

11. (Original) The apparatus of Claim 9, wherein the plurality of incremental values are time-multiplexed with the full channel quality values.

12. (Original) The apparatus of Claim 9, further comprising a transition indicator subchannel generation system for generating a flag that indicates the start of a transitional period.

13. (Original) The apparatus of Claim 12, wherein a Walsh spreading element is used in the re-synch subchannel generation system and not used in the differential feedback subchannel.

14. (Original) The apparatus of Claim 12, wherein a common Walsh function is used in the differential feedback subchannel generation system and the transition indicator subchannel generation system.

15. (Original) The apparatus of Claim 14, wherein the common Walsh function is used to indicate a base station index.

16. (Original) A method for transmitting channel information from a remote station to a base station, comprising:

  generating a full channel quality value; and

  generating an incremental channel quality value, wherein the incremental channel quality value is multiplexed with the full channel quality value.

17. (Original) The method of Claim 16, wherein the full channel quality value is generated over more than one slot.

18. (Original) The method of Claim 16, wherein the incremental channel quality value is generated over each slot in a channel frame.

19. (Original) The method of Claim 18, further comprising:

  generating a transition indicator, wherein the transition indicator is multiplexed with the incremental channel quality value and the full channel quality value and is used to indicate a transition period for the base station.

Claim 20 (Cancelled)

21. (Original) Apparatus for transmitting channel information from a remote station to a base station, comprising:

  means for generating a full channel quality value; and

  means for generating an incremental channel quality value, wherein the incremental channel quality value is multiplexed with the full channel quality value.

22. (Original) The apparatus of Claim 21, further comprising:

    means for generating a transition indicator, wherein the transition indicator is multiplexed with the incremental channel quality value and the full channel quality value and is used to indicate a transition period for the base station.

Claims 23-27 (Cancelled)

Please add the following new claims:

28. (New)   A method for transmitting channel information from a remote station to a base station, comprising:

    generating a full channel quality value and determining said full channel quality value exceeds a maximum value represented by a finite number of data bits;

    generating an incremental channel quality value and fixing said incremental value as an up-increment value, wherein said fixing is in response to said determining;

    multiplexing the incremental channel quality value with the full channel quality value to form channel information for transmission from said remote station to said base station.

29. (New)   A method for transmitting channel information from a remote station to a base station, comprising:

    generating a full channel quality value and determining said full channel quality value is below a minimum value represented by a finite number of data bits;

    generating an incremental channel quality value and fixing said incremental value as a down-increment value, wherein said fixing is in response to said determining;

    multiplexing the incremental channel quality value with the full channel quality value to form channel information for transmission from said remote station to said base station.

30. (New)   An apparatus for transmitting channel information from a remote station to a base station, comprising:

means for generating a full channel quality value and determining said full channel quality value exceeds a maximum value represented by a finite number of data bits;

means for generating an incremental channel quality value and fixing said incremental value as an up-increment value, wherein said fixing is in response to said determining;

means for multiplexing the incremental channel quality value with the full channel quality value to form channel information for transmission from said remote station to said base station.

31. (New)   An apparatus for transmitting channel information from a remote station to a base station, comprising:

means for generating a full channel quality value and determining said full channel quality value is below a minimum value represented by a finite number of data bits;

means for generating an incremental channel quality value and fixing said incremental value as a down-increment value, wherein said fixing is in response to said determining;

means for multiplexing the incremental channel quality value with the full channel quality value to form channel information for transmission from said remote station to said base station.